

What is claimed is:

1                   1.     A display interface having a group of channels for tuning a  
2 television receiver, said display interface comprising:

3                   a channel matrix having n columns and m rows for displaying a plurality  
4 of definable channel indicators for at most  $n \times m$  channels, where n and m are  
5 positive integers greater than 2, each definable channel indicator corresponding to a  
6 respectively different position in the matrix, wherein channels having programs with  
7 viewer selected features are highlighted;

8                   a cursor configured to be moved to positions along the rows and  
9 columns of the matrix;

10                  a channel status section which displays status information on a television  
11 channel corresponding to the indicator at the position of the cursor on the matrix; and

12                  a channel selector which selects and tunes the channel corresponding to  
13 the definable channel indicator at the position of the cursor on the matrix.

1                   2.     A display interface in accordance with claim 1, wherein the  
2 channels represented by the channel matrix are one group of channels among a  
3 plurality of channel groups and the channel matrix further includes a channel group  
4 selector configured to be activated to switch the channel matrix among the groups of  
5 channels to select a current group of channels.

1                   3.     A display interface in accordance with claim 1, wherein the  
2 viewer selected features include a plurality of program types and the display interface  
3 further includes means for selecting one of the program types as the viewer selected  
4 feature.

1                   4.     A display interface in accordance with claim 3, wherein the  
2 program types are predetermined program types.

1           5.     A display interface in accordance with claim 3, wherein the  
2 program types are defined by the viewer.

1           6.     A display interface in accordance with claim 1, wherein the  
2 viewer selected features include at least one program transmission characteristic.

1           7.     A display interface in accordance with claim 1, wherein n and m  
2 equal 10 such that each group of channels includes at most 100 channels, and the  
3 channel group selector displays a category indicator for the current group of channels.

1           8.     A display interface in accordance with claim 1, wherein each  
2 definable channel indicator in said channel matrix is color-coded to indicate the status  
3 information of the corresponding channel.

1           9.     A display interface in accordance with claim 1 further including a  
2 remote control device, including at least one cursor navigation key for moving the  
3 cursor along the rows and columns of the matrix, wherein the channel selector is a  
4 further key on the remote control device.

1           10.    A display interface in accordance with claim 1 further including a  
2 voice recognition system that recognizes voiced direction commands to move the  
3 cursor along the rows and columns of the matrix and recognizes a voiced selection  
4 command to act as the channel selector.

1           12.    A user interface method for controlling a television receiver to  
2 select television programs that are transmitted through the channels for display,  
3 wherein the television receiver is configured to receive C channels, where C is an  
4 integer, the method comprising the steps of:

5                displaying a channel matrix having n columns and m rows for displaying  
6 channel indicators for at most n x m channels, where n and m are positive integers  
7 greater than 2 and n x m is less than C, each definable channel indicator  
8 corresponding to a respectively different position in the matrix, wherein channels  
9 having programs with viewer selected features are highlighted;

10 moving a cursor over the channel indicators in the matrix to indicate a  
11 possible selection of a channel corresponding to one of the definable channel  
12 indicators;

13 displaying status information concerning the possibly selected channel;  
14 and

15 responsive to the displayed status information, selecting the channel  
16 indicator to cause the television receiver to display the television program  
17 corresponding to the channel indicator.

1 13. A method in accordance with claim 12, wherein the channels  
2 represented by the channel matrix are one group of channels among a plurality of  
3 channel groups and the method further includes the steps of:

4 prompting a viewer to select the features of the programs;

5 displaying a channel group selector representing the one group of  
6 channels in which all channel indicators in the one group of channels that have at least  
7 one of the selected features are highlighted.

1 14. A method in accordance with claim 13 further wherein the step of  
2 highlighting the channel indicators for the programs having the viewer selected  
3 features includes the step of displaying the highlighted channel indicators in a  
4 different color than other channel indicators in the channel matrix.

1 15. A method in accordance with claim 14 further including the steps  
2 of:

3 displaying a feature selection portion including a plurality of features  
4 representing respectively different types of programs and at least one feature  
5 representing a function that may be performed on the channels represented by the  
6 channel matrix and prompting a viewer to select at least one program type or at least  
7 one function as the selected features; and

8 highlighting the channels having the programs with the selected program  
9 types and displaying, in the status information, results of applying the at least one  
10 selected function to the possibly selected channel.

1 16. A method in accordance with claim 15 where the at least one  
2 function includes determining a V-Chip rating for the possibly selected channel.

1 17. Apparatus for implementing a display interface having a group of  
2 channels for tuning a television receiver, said display interface comprising:

3 means for displaying a channel matrix having n columns and m rows for  
4 displaying definable channel indicators for at most  $n \times m$  channels, where n and m are  
5 positive integers greater than 2, each definable channel indicator corresponding to a  
6 respectively different position in the matrix wherein channels having programs with  
7 viewer selected features are highlighted;

8 means for moving a cursor over the definable channel indicators in the  
9 matrix to indicate a possible selection of a channel corresponding to one of the  
10 definable channel indicators;

11 means for displaying status information concerning the possibly selected  
12 channel; and

13 means, responsive to the displayed status information, for indicating a  
14 selection of the channel indicator corresponding to the possibly selected channel to  
15 tune the television receiver to receive the program corresponding to the selected  
16 channel indicator.

1 18. A computer readable carrier including a computer program that  
2 controls a computer to implement a display interface having a group of channels for  
3 tuning a television receiver, the computer program causing the computer to perform  
4 the steps of:

5 displaying a channel matrix having  $n$  columns and  $m$  rows for displaying  
6 definable channel indicators for at most  $n \times m$  channels, where  $n$  and  $m$  are positive  
7 integers greater than 2, each definable channel indicator corresponding to a  
8 respectively different position in the matrix, wherein channels having programs with  
9 viewer selected features are highlighted;;

10 moving a cursor over the channel indicators in the matrix to indicate a  
11 possible selection of a channel corresponding to one of the channel indicators;

12 displaying status information concerning the possibly selected channel;  
13 and

14 responsive to the displayed status information, selecting the channel  
15 indicator corresponding to the possibly selected channel to cause the television  
16 receiver to display the television program corresponding to the selected channel  
17 indicator.